- (22) *O. arnensis* (Shaw): Two specimens were observed under stones from two different sites.
- (23) Amphiesma stolata (Linn.): Very common. A mating pair was observed on 2nd July, 1994, on a foot-path.
- (24) *Macropisthodon plumbicolor* (Schneider): Very common. Hatchlings appear in rainy season. It is very common in forest nurseries and lives beneath poly-bags containing seedlings.
- (25) Xenochrophis piscator (Schneider): Very common, locally called 'Dindu' by bhils, and 'Diwad' by kathodies. During fish catching operation with specially made bamboo baskets, this species of snake is also trapped along with fishes by tribals. It is present in almost all the wells, nullahs, ponds, dams etc. of the area.
 - (26) Elaphe helena (Daudin): Common:
 - (27) Ptyas mucosus (Linn.): Uncommon.
- (28) **Dendrelaphis tristis** (Daudin): Common. During summer it is seen on medium sized *Acacia leucophloea* trees. Frequent in areas having vegetation in crown contect or crown overlapping stages. One was seen hibernating in a hole near a wooden post on the verandah of a house.
- (29) *Psammophis leithi* Gunther: One specimen was collected from a bush.
- (30) Ahaetulla nasutus (Lacepeda): Collected one from Dharawan Reserve Forest.
- (31) *Boiga trigonata* (Schneider): Common. *B. forstenii* (Dum. & Bibr.) though recorded in the Mt. Abu area by McCann (1946)

was not seen in Phulwari ki Nal.

Family: ELAPIDAE

- (32) Bungarus caeruleus (Schneider): Common.
- (33) Naja naja (Linn.): Locally called 'Nagin', 'Gogaji', 'Kala Hamp' (samp) ('s' is pronounced as 'h' by natives). It is a sacred and protected snake in the area. Nomadic kalbelias used to display it in cities and rural areas to earn a living.

Family: VIPERIDAE

- (34) Vipera russelli (Shaw): Uncommon.
- (35) *Echis carinatus* (Schneider): Very common, locally called 'Kankariwala'. It prefers open rocky areas.

SUMMARY: 35 species of reptiles containing 30 genera belonging to 17 families have been recorded from Phulwari Ki Nal Wildlife Sanctuary. After taking measurements, animals were released at the same site at which they were captured.

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January 7, 1996 SATISH KUMAR SHARMA

Range Forest Officer,

Aravalli Afforestation Project,

Jhadhol (F.), Dist. Udaipur (Raj.), 313 702.

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22. REPTILES OF PERIYAR TIGER RESERVE, KERALA

Forty-five species of reptiles including two species of testudines, (in two families) 13 species of lizards (in 4 families) and 30 species of snakes

(in 5 families) have been recorded in Periyar Tiger Reserve. Seven species of lizard and 26 species of snakes have been collected, of which

Table 1
REPTILIA OF PERIYAR TIGER RESERVE

Scientific Name	Common Name	Status	Habitat	Distribution in India
Order TESTUDINES Family Emydidae (Fresh water)				
1. Melanochelys trijuga (Schweigger)	Terrapin	Common	Lake	Throughout Indian subcontinent
Family Testudinidae (Land) 2. Indotestudo forstenii (Schlegel & Muller)	Travancore Tortoise	Uncommon	MD	Western Ghats
Order SQUAMATA Sub order SAURIA (Lacertilia) Family GEKKONIDAE				
3. Cnemaspis indica (Gray)	Dwarf Forest Gecko	Common	MD	Western Ghats
4. C. kandiana (Kelaart)	**	**	SE	India, Sri Lanka
5. Hemidactylus brooki Gray	Spotted House Gecko	Common	MD	Throughout Indian Subcontinen
6. H. frenatus Schlegel	Southern House Gecko	Uncommon		"
Family AGAMIDAE 7. Calotes versicolor (Daudin)	Garden Lizard	Common	MD	27
8. C.elliotti Gunther	Spotted Tree Lizard	Uncommon	E/SE	Western Ghats
9. C. rouxi Dum. & Bibr.	Forest Calótes	Rare	SE	Western Ghats
10. C. calotes (Linnaeus)	Green Callotes	Uncommon	MD	**
11. Draco dussumieri Dum. & Bibr.	Flying Lizard	Common	MD/SE	S.W. Ghat Eastern India (Disjunct)
Family Scincidae		Common	MD	Throughout subcontinent
12. Mabuya carinata (Schneider)	Common Skink	Common	MD/SE	Western Ghats
13.M. beddomii (Jerdon)		Uncommon		Western Ghats, Sri Lanka
14.M. macularia (Blyth)		Uncoomon	SE	Throughout Indian subcontinent
Family VARANIDAE 15. Varanus bengalensis (Schneider)	Monitor Lizard	Common	MD/SE	Indian subcontinent
Suborder SERPENTES (Ophidia)				
Family Typhlopidae 16. Rhamphotyphlops braminus (Daudin)	Common Worm-Snake	Common	MD	Throughout Indian subcontinen
Family Uropeltidae 17. <i>Uropeltis elliotti</i> (Gray)	Elliot's Uropelt	Common	SE/MD	Western Ghats, Eastern Ghats.
18. U. ocellatus (Beddome)	Anaimalai Uropelt	Common	E/SE	Western Ghats

Table 1 (contd.) REPTILIA OF PERIYAR TIGER RESERVE

Scientific Name	Common Name	Status	Habitat	Distribution in India
19. Plectiurus perroteti Dum. & Bibr.			_	_
Family BOIDAE 20. Python molurus (Linnaeus)	Indian Python	Uncommon	MD	Throughout subcontinent
Family Colubridae 21. Elaphe helena (Daudin)	Common Trinket Snake	Uncommon	MD	Throughout subcontinent
22. Coluber mucosus (Linn.)	Rat Snake	Uncommon	MD/SE	Throughout subcontinent
23. Oligodon arnensis (Shaw)	Common Kukri Snake	Uncommon	MD/SE	Throughout subcontinent
24. O. taeniolatus (Jerdon)	Russel's Kukri Snake	Uncommon		Western Ghats
25. Dendrelaphis tristis	Common Indian Bronzeback	Uncommon	MD/SE	_
26. Chrysopelea ornata (Shaw)	Golden tree snake	Uncommon	MD/SE	_
27. Lycodon aulicus (Linnaeus)	Common Wolf Snake	Uncommon	****	Throughout subcontinent
28. Amphiesma stolata (Linne)	Buffstriped Keelback	Common	MD/SE	"
29.A. beddomiei	Beddome's Keelback	Rare		Western Ghats
30.A. monticola (Jerdon)	Yellow Collared Forest Keelback	_		"
31. Macropisthodon plumbicolor (Cantor)	Green Keelback	Uncommon	MD	Throughout India
32. Xenochrophis piscator (Schneider)	Checkered Keelback	Common	Lake/ Marsh	Throughout India, S.E. Asia.
33. Xylophis stenorhynchus (Gunther)	Striped Small-headed Snake	Uncommon		South India
34. Boiga dightoni (Boulenger)	Dighton's Cat Snake	Uncommon	MD	S. Western Ghats
35. B. ceylonensis (Gunther)	Ceylon Cat Snake	Uncommon	MD/SE	Western Ghats, Eastern Ghats South Western Ghats
36. Ahaetulla perroteti (Dum. & Bibr.)	Bronze-headed Whip	Uncommon	SE/MD	Western Ghats
37.A. dispar (Gunther)				**
Family: ELAPIDAE 38. Bungarus caeruleus (Schneider)	Common Krait	Uncommon	MD	Throughout India
39. Naja naja (Linn.)	Indian Cobra	Common	E/MD	Throughout Indian subcontinent
40. Ophiophagus hannah (Cantor)	King Cobra	Rare	E/SE	S.W. Ghats, Sri Lanka, S.E. Asia (Disjunct)

Table 1 (contd.)
REPTILIA OF PERIYAR TIGER RESERVE

Scientific Name	Common Name	Status	Habitat	Distribution in India
Family: Viperidae				
41. Vipera russelli (Shaw)	Russel's Viper	Uncommon	MD/SE	Throughout Indian subcontinen
42. Hypnale hypnale (Merrem)	Humpnosed Pit Viper	Uncommon	MD/SE	Western Ghats
43. Trimeresurus macrolepis				
Beddome	Largescaled Pit Viper	Rare	E/SE	S. Western Ghats
44. T. malabaricus (Jerdon)	Malabar Pit Tper	Rare	E/SE	Western Ghats
45. T. gramineus (Shaw)	Bamboo Pit viper	Uncommon	E/SE	S. Western Ghats

Abbreviations:

E — Evergreen

MD — Moist Deciduous

SE — Semi Evergreen

13 species of snakes are endemic to the Western Ghats. These include 4 species of pit vipers; viz. Trimeresurus macrolepis, T. malabaricus, T. gramineus and Hypnale hypnale. The King Cobra Ophiophagus hannah also occurs in Periyar.

According to the literature, a rich fauna of reptiles occurred in Kerala (Boulenger 1892, 1894, 1896, Ferguson 1895, 1903, Wall 1906, Smith 1931-43, 1949, Hutton 1948, Whitaker 1978, Daniel 1983, Murthy 1981, 1990). But very little is known about their present status. Reptiles in Kerala are threatened with poaching, wanton killing and habitat destruction.

Periyar Tiger Reserve, a portion of the erstwhile Cardamom Hill Reserve, is situated on the Western Ghats in the Idukki district of Kerala between 9° 16' and 9° 40' N lat. and from 76° 55' to 77° 25' long. It is bordered on the north by Peermedu Taluk of the Idukki dist., in the west and south by Kottayam and Pathanamthitta dist., and in the northeast, east and southeast by Madurai and Thirunelveli dist. of Tamil Nadu. It has an area of 777 km. Altitude ranges from 700-2019 m and several peaks rise above 1600 m. The terrain is undulating. The Periyar Plateau has about 50 km width on the Western Ghats.

Though it is called a plateau, it consists of a chain of hills, separated by valleys, sometimes 300 m deep. On the eastern and northern sides, along the crestline at about 2000 m elevation, runs the state boundary. The elevation drops to about 200 m on the eastern side of the crestline. The Periyar plateau is drained by Mullayar and Periyar rivers which join together at Mullakudy, forming the Mullaperiyar river. Periyar Lake was formed by the construction of a dam across this river, in 1895. It has an area of about 26 sq. km.

Periyar has a humid climate with temperature varying from 15° - 31°C and an average rainfall of 2500 m. July has the heaviest rainfall. November to January are cool, and March and April are the hottest months.

The following types of vegetation have been identified in the reserve *viz*. the tropical evergreen forest (305 sq. km), tropical semievergreen forest (275 sq. km), moist deciduous forests (100 sq. km), grasslands (12 sq. km), eucalyptus plantation (55 sq. km), and reeds (5 sq. km). Savannah type vegetation occurs in several areas. The high hills are covered with grasses.

Reptiles were collected from January-December 1992-94, preserved in 5% formaline, and brought to the laboratory for identification.

Two species of testudines, *Varanus*, rat snake and King cobra were not collected. We also received dead snakes from local people, including tribals and firewood collectors.

Forty-five species of reptiles in 11 families were recorded in Periyar Tiger Reserve (Table 1).

Testudines (Turtles and Tortoises)

This group is represented by 2 species, the pond terrapin *Melanochelys trijuga* and the Travancore tortoise *Indotestudo forstenii*. The terrapin is often seen basking on logs or rocks in the lake.

Lizards

Thirteen species of lizards have been recorded from Periyar. These include species such as Cnemaspis indica, Calotes elliotti, C. rouxi and Mabuya beddomii which are endemic to the Western Ghats, and the flying lizard Draco dussumieri, an Indo-Malayan element in southern Western Ghats. Calotes is a major prey

of birds like the shikra Accipiter badius, while Mabuya is preyed up on by the jungle cat Felis chaus and Varanus by the tiger.

Serpentes

Thirty species of snakes have been recorded from Periyar during this study. Of these 13 species are endemic to the Western Ghats. The King cobra is rare in the Reserve.

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Dept. of Zoology

St. Joseph's College, Devagiri,

Calicut-673 008, Kerala.

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